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RHODE ISLAND

MAY 13 ARBOR DAY 1921

RHODE ISLAND EDUCATION CIRCULARS

THIRTIETH ANNUAL PROGRAM

FOR THE

OBSERVANCE OF ARBOR DAY IN THE SCHOOLS OF RHODE ISLAND

MAY 13, 1921

(Edition of 70,000)

Grey Birches

THE COMMISSIONER OF EDUCATION
STATE EDUCATION SERVICE
RHODE ISLAND

Example of Reforestation on the Estate of Hon. Henry F. Lippitt in Cumberland.

State of Rhode Island
Public Education Service

COMMISSIONER'S ARBOR DAY MESSAGE

To the Boys and Girls of Rhode Island Schools:

Our schools have kept Arbor Day for thirty years, and in all this time the trees and children alike have been growing in stature and from the trees and all living things the children and youth of the schools have been learning more and more of nature's creations, of which "Day unto day uttereth speech and night unto night showeth knowledge." Taught by the trees, we see in their fresh leaves and tender blossoms the coming of springtime, making all things new; and in the name of the trees, we keep a May day festival in the joy and kindness of earth's awakening.

In the gladness of springtime there is always a note of duty, a call to plant that "the earth may yield her increase." To remind you that in the service of Arbor Day the planting of trees comes first, reforestation has been selected as the special feature of this year's program. You may find valuable lessons in the selections on forestry prepared by friends expressly for you. While other interesting features invite your attention, you are asked to give thought to the great national cause of forestry, which in coming years will need the help of every good citizen. If possible, let the day be observed by the planting of trees. As I wrote a year ago, "Though many of you may have no opportunity to plant a tree this year, you will keep in mind our country's need of trees and be ready as good citizens to do your part when you can find or make an opportunity. Some of you, I hope, in the years to come may even plant forests of trees and for that end cherish such aspiration from this Arbor Day until it be attained."

Many do not know that some of the earliest and finest examples of reforestation and forest conservation are in Rhode Island, as shown by the illustrations of this and former programs. Nearly fifty years ago, before the American Forestry Association was formed or the National Bureau of Forestry was organized, the planting of the extensive forest on Potowomut Neck was begun. The visit of a school to one of these reforested woodlands would be a fitting observance of Arbor Day. In future years may not forests arise in waste places from the inspiration of these examples, planted by the hands of those who to-day in our schools are learning the beauty and utility of trees?

Walter E. Ranger

Commissioner of Education.

My life shall grow like trees both tall and fair
That rise and spread and bloom toward fuller fruit each year.
—*George Eliot.*

SUGGESTIVE PROGRAM

Theme for Arbor Day, 1921—Reforestation.

CHORUS. SCRIPTURE. RECITATIONS.
SONG. ESSAY—"Ancient Trees." ESSAY—"Protection of Trees." SONG.
BRIEF REPORTS ON PLANTING TREES.
RECITATIONS. SONG. GROUP EXERCISE—"Rhode Island Forestry."
CHORUS. PLANTING EXERCISES.

PLANT A TREE

The Past unto the Present cries—
"Arise, ye more than blind, arise!
For I who felled the forest low
Would now again a forest grow,
But what is done I cannot mend,
So unto you a message send—
Much have I done for you, for me,
Plant a tree,
Plant a tree."

The Present, waking from its sleep,
Across the hills began to creep,
And saw where Past had felled afar
A noble forest, with its scar
On many a wounded mountain side
That from the elements would hide,
And answered: "Past, I will for thee
Plant a tree,
A forest tree."

The feeling Future, yet unborn,
Heard Present echoing her horn,
And stirring somewhat in Life's cell
Did try her dearest wish to tell,
Whispering in an undertone:
"I, I shall reap as ye have sown.
Oh heed the Past, and—thanks to thee—
Plant a tree,
Plant a tree."
—*Irving Sidney Dix.*

"Every man, woman, and child in the United States is affected by the forest question, for wood enters into the daily life of most of us in more ways, perhaps, than any other product."

WELCOME TO ARBOR DAY

Tune: *"America"*

O welcome, Arbor Day,
List nature's welcome lay
With joy replete.
O day of festal mirth,
Of beauty, sense and worth,
Thou to adorn the earth,
Hath mission sweet.

When thy glad morn appears,
Bright hopes of future years
Our thoughts employ.
Day of unselfish deeds,
When care for others' needs
Shall freely plant the seeds
Of future joy.

All praise to him whose hand
Shall bless our native land
With gifts so free.
To him may nature bring
Her choicest offering,
And birds his praises sing,
Who plants a tree.
—*Journal of Education.*

SCENES OF ARBOR DAY

A lifetime treasure of shade or fruit
May children gain for their transient toil,
When a tree shall rise from the slender root
They are burying deep in the mellow soil.

Thus, year by year, as the day comes round,
Be this the work of our loyal care,
Till the land shall be with beauty crowned,
And waste-fields change to a garden fair.—*Eugene C. Dolson.*

It is perfectly practical and feasible to provide for a new growth of timber and an imperative duty to improve our forest protection. I can think of no forward look in relation to the good fortunes of America which does not contemplate a forest policy which will assure us the essential in the lumber line for all our constructive activities.—President Warren G. Harding.

SELECTIONS FROM THE SCRIPTURES FOR ARBOR DAY

THE PLANTING OF TREES AND GARDENS

And the Lord planted a garden eastward in Eden.—*Genesis ii*:8.

And Noah began to be an husbandman and he planted a vineyard.—*Genesis ix*:20.

And Abraham planted a grove in Beer-Sheba.—*Genesis xxi*:33.

The trees of the Lord are full of sap; the cedars of Lebanon, which he hath planted.—*Psalm civ*:16.

As the valleys are then spread forth, as gardens by the riverside, as the trees of lign aloes which the Lord hath planted, and as cedar trees beside the waters.—*Numbers xxiv*:6.

I will plant in the wilderness the cedar, the shittah tree, and the myrtle, and the oil tree; I will set in the desert the fir tree, and the pine, and the box tree together.—*Isaiah xli*:19.

He took also the seed of the land, and planted it in a fruitful field; he placed it by great waters, and set it as a willow tree.—*Ezekiel-xvii*:5.

They shall not build and another inhabit; they shall not plant and another eat; for as the days of a tree are the days of my people, and mine elect shall long enjoy the work of their hands.—*Isaiah-liv*-22.

Build ye houses, and dwell in them; and plant gardens, and eat the fruit of them.—*Jeremiah-xxix*:5.

Thou shalt yet plant vines upon the mountains of Samaria: The planters shall plant, and shall eat them as common things.—*Jer.-xxxi*:5.

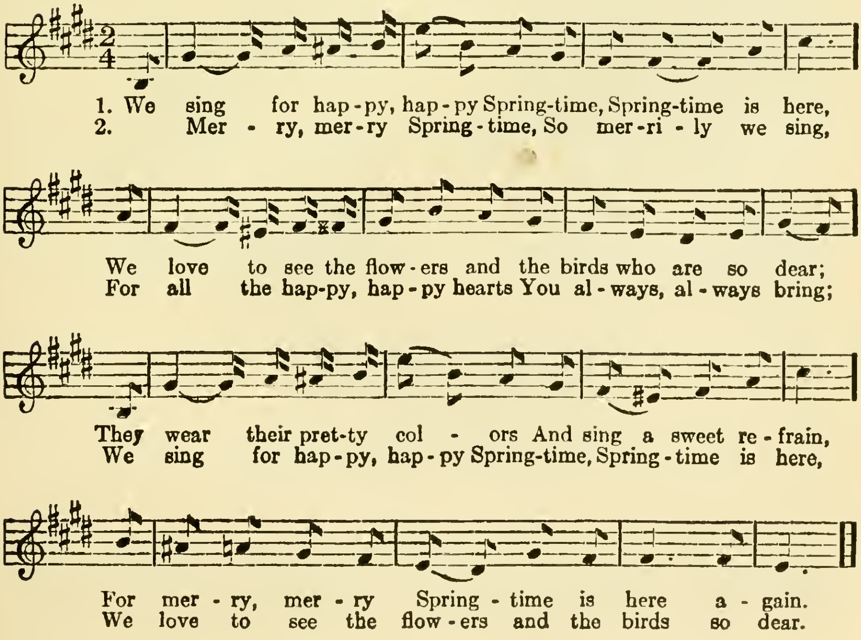
And they shall build houses, and inhabit them; and they shall plant vineyards, and eat fruit of them.—*Isaiah-liv*-21.

It was planted in a good soil by great waters, that it might bring forth branches, and that it might bear fruit, that it might be a goodly vine.—*Ezekiel-xvii*:8.

Happy Springtime

LENA MARTIN-SMITH

Arr. E. A. PARKER
Tune:—"Spring Song"


1. We sing for hap-py, hap-py Spring-time, Spring-time is here,
2. Mer - ry, mer-ry Spring-time, So mer-ri - ly we sing,
We love to see the flow-ers and the birds who are so dear;
For all the hap-py, hap-py hearts You al-ways, al-ways bring;
They wear their pret-ty col - ors And sing a sweet re-frain,
We sing for hap-py, hap-py Spring-time, Spring-time is here,
For mer - ry, mer - ry Spring - time is here a - gain.
We love to see the flow-ers and the birds so dear.

INVOCATION FOR TREE PLANTING

We, children of the free,
Come here to plant this tree,
With prayer and song;
A living sign to stand,
Of love to Motherland,
While years prolong.

'Tis meet a leafy shade
Should shelter boy or maid,
Who hither hies,
To spend in studious hours
Fair childhood's growing powers,
And seek truth's prize.

In every flower and tree,
God's forming hand we see,
And His great love,
And every bud and leaf
Increases our belief
In heaven above.

Dear God of Nature, grant
This tree which now we plant
May live and grow,
To bless with grace and shade
This loved and cherished glade,
Our love to show.

—*P. Harlow.*

Pines at Exeter School, Planted Ten Years Ago.

OUR TREE

Out in the wildwood, with none to see,
Under the ferns and the maiden hair,
We found this dear little maple tree,
And we thought perhaps it was lonesome there,
So we dug it up, little root and all,
And we plant it here by the schoolhouse wall,
To be our pet and to watch our plays,
And to grow and grow all the summer days.

—*The Youth's Companion.*

THE OPEN ROAD

Come, walk the open road with us,
Far out beyond the town,
Where all the winds of Arcady
Go wandering up and down.

If problems vex, if cares perplex,
O leave them all behind.
Step lightly here, with vision clear,
And free, inquiring mind.

—*Lillian Leveridge.*

THE TEMPLE OF THE TREES

I'm dumb with awe, when I behold
The wondrous shining cloth of gold,
Spread over all the temple trees,
With crimson splashes on the leaves.
Some master mind commanded this;
And flung a veil of grayish mist
Over the hillside and the stream,
Through which the golden steeples gleam.

I seem to hear it everywhere,
A whispered chant, a whispered prayer,
And zephyrs blow, so soft a sound;
Caressing all the hallowed ground.
There in the scented purplish haze
I hear a solemn hymn of praise,
A voice that whispers to my heart,
The secret of this wondrous art.

The trees stand silent, side by side,
Waiting, waiting like a bride.
Changing, changing every hour
By some secret hidden power.
By some artist hand unseen,
Turn to gold the brilliant green.
Royal purple, crimson, gray;
Like the night unto the day.

Oh! temple of the trees, my soul
Bows down to worship all your gold.
This miracle, wonderful to see;
How every leaf on every tree
Is waiting in a golden glow
The fast approaching time to go.
How everything that spring gave birth
Is going back to mother earth.

The cloister bells ring low and sweet,
There, where the crimson arches meet
I walk alone, and thoughts divine,
Flock to this open church of mine.
I walk alone, and not afraid,
For he who all this splendor made;
We mortals cannot comprehend
How great, how true, how kind a friend!

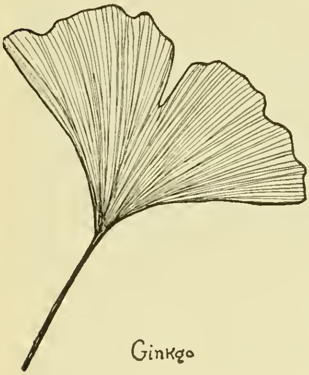
—*Morgan Shirley Howard.*

The illustration on the front cover of this booklet is a view of trees planted on the "Thorncliffe" Estate, Potowomut, among which the largest is a Scotch Pine, planted in 1878. The picture on the back cover shows a grove of Norway spruces planted on the same estate thirty odd years ago.

TWO TREES OF ANCIENT LINEAGE

Marion D. Weston, Ph.D., Rhode Island College of Education.

We can readily imagine how interested the people of Providence would be if they should see a descendant of Roger Williams walking along Westminster street. Every day on our way to school some of us are passing trees whose ancestry can be traced far back into the dim ages of the past before the first human beings appeared upon this earth. Although the life story of an individual tree may be interesting we find the history of some of our tree families almost romantic. There are two trees, not uncommon in Rhode Island, whose ancestors have experienced remarkable adventures.

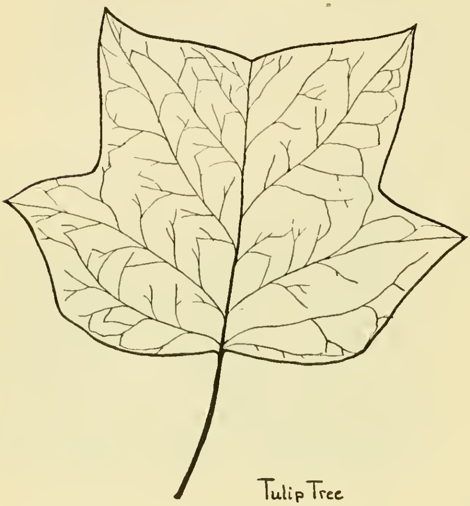


One of these trees is the Chinese Ginkgo, which has been planted extensively in certain sections of Providence. There are beautiful great specimens on the Dexter Asylum Grounds and many small trees along Blackstone Boulevard in the vicinity of Swan Point. Flourishing young trees are also growing along Washington street in front of the Public Library.

The Ginkgo receives its name from the Japanese form of the Chinese name "Yin-kou." It has been preserved with loving care by the Buddhist monks around their shrines for many centuries. For many years it was supposed that the Ginkgo was no longer growing in a wild state in any part of the world, but recent explorations in western China have found it native in that wild region. The leaf of this tree is most unique. One ancient Chinese name "Ya-chio-tzu" meaning, "the tree with leaves like a duck's foot" quaintly suggests the unusual shape of the leaf. Another name "Maidenhair Tree" is frequently used in this country because of the resemblance to the leaf of the maidenhair fern.

The Ginkgo has been called a "Living Fossil" because its fossil leaves are almost precisely like those of the living tree. We know that the Ginkgo once grew almost everywhere because its leaves are found as fossils all over the Northern Hemisphere and in portions of Africa and Australia as well. Why should a tree which once flourished over so large a part of the world be found to-day wild in only one small area in western China? Everyone realizes the enormous influence exerted by the great glacier on the land forms of New England, but few stop to think that the ice had also a very decided effect on the plant life. When the great ice sheets were creeping southward the chilling of the climate, hundreds of miles in advance of the glacier, forced the vegetation southward also, until in Europe the march was stopped by the Mediterranean and in North America, where there was no great water barrier, the northern trees made their homes in what is now our southern states. Although many trees followed the retreating ice northward once more as the climate became warmer the Ginkgo was not one of the survivors. In sections of Asia where the vegetation has not been confronted by such trying conditions the Ginkgo still holds its own, the sole representative of a proud and ancient race which once inherited the earth.

Although the Ginkgo is by far the most conservative of trees, having kept identical styles in leaves for some 3,000,000 years, there are other trees which can trace their lineage far into the past. One of these, the Tulip Tree, is rather well known in Providence, although our state is a little north of its native home, which lies southward from New York state. There is a magnificent Tulip Tree in the yard of the Diman estate on Angell street; another in the Metcalf Botanical Gardens near Hope street and many others scattered about the city.


Tulip Tree

The name of the Tulip Tree is readily accounted for by the resemblance of its beautiful, salmon-marked, creamy flowers to the garden tulip. The leaf is easily recognized because of the absence of the terminal point found in all of the maples. It has been suggested that the leaf, because of this peculiarity, packs most advantageously in the bud. However this may be, the arrangement of leaves and protecting scales in the Tulip bud is most clever. Find the nearest Tulip Tree this spring, watch the opening of the buds and see if you do not admire the way in which the leaves are arranged.

As you know there are many kinds of maples, more than half a dozen growing here in Providence, but there is only one kind of Tulip Tree in North America and only two kinds in the whole world. After the explanation of why the Ginkgo is native only in western China, it is not surprising to find that the second Tulip Tree is found in China also. While fossil Tulip Tree leaves show that once this tree ranged throughout the Northern Hemisphere, it is found in the wild state to-day in only two places in the world, Southern United States and western China.

REFERENCES: The Romance of Our Trees, Ernest Wilson, *The Garden Magazine,* October, November, December, 1919.

THE ELM TREE

The farmer stood by the carriage-house door,
Studying with pride his homestead o'er.
"I wish I had planted one more tree,
Just here on this side, by the vines," thought he.

Then he brought to the spot that sweet spring day,
A young strong elm from over the way,
And placed it there by the carriage-house door,
Just where it was needed so much before.

Lo, the years went by, till ninety were told—
One sows, nor reaps, 'tis the story old—
When a farmer, young, stood by the door,
Surveying with pride his domain o'er.

Said he, "The most beautiful thing I see
Is this grand, o'er-arching, old elm tree.
Who planted it, boy? His name ye must read
"In the loving thought, the loving deed."

—***Normal Instructor.***

RHODE ISLAND FORESTRY

By Jesse B. Mowry, Commissioner of Forestry

Rhode Island has approximately one-quarter million acres of unimproved land, —land bearing forest or capable of bearing forest. Some of this land, doubtless, might well be reclaimed to agriculture. Much of it on account of its rocks, ledges, or infertility, is unprofitable for agriculture at the present stage in our economic development. This rough and sterile land may, for practical purposes, be classed as forest land. Some land is idle and unproductive, yielding neither field nor forest products. Now if it is common sense to develop the arable land, why is it not also common sense to develop with men and money the forest land of the state? The right use of land is usually regarded as a true and searching test of private enterprise and of public policy.

Volunteer Stand of White Pine: Estate of E. E. Arnold, Greene.
—*Photo by R. A. Sheals.*

FOREST PLANTING.

The good market condition, the large areas of non-agricultural land, the low cost of nursery stock, the rapid rise of stumpage, and the number of quick-growing species adapted to our soils all favor forest planting. Although the planter may not live to sell the timber planted, still his planting adds materially to the future sale value of his farm lands. Water companies can well afford to plant on watersheds and on lands bordering reservoirs. *Forest plantations are exempt from taxation for a period of* 15 *years.*

Plantations of white pine and red pine yield 25,000 to 30,000 board feet per acre at age 50 years, on about all kinds of soil; black oak, 500 to 600 railroad ties at 40 years; shellbark hickory, 15 to 20 cords in 30 years on fairly moist soil; white ash, 10,000 feet in 25 years in moist soils and swamps; tulip tree, 35,000 feet in 50 years on well drained borders of swamps.

CUT-OVER CHESTNUT LANDS.

The upland hardwood forest of this state consists of chestnut in mixture with several species of oak, red maple, grey birch, hickory, white pine and hemlock. Here and there chestnut occurs in almost pure stands. In other stands, 50 per cent. of the growth is of this species. The chestnut blight having forced the cutting of chestnut, the question arises as to what to do with these chestnut lands. If these cut-over lands are left untouched, the succeeding crop of chestnut sprouts and seedlings soon become infected with the blight, so that in stands composed largely of chestnut there is no hope of natural reproduction.

Some of these chestnut lands will be converted into pastures for sheep and cattle; other tracts will, undoubtedly, be used for orchards. In types where the percentage of chestnut is small, the other species may be relied upon for natural reproduction, if the cutting of these types is properly handled. In stands composed largely of chestnut, a change of forest type is indicated if the land is to be used longer for forest growth. In changing the type, white pine may be planted at intervals of six feet on areas cut clear. On tracts where scattered oaks and other hardwoods have been left to reach maturity, the pines may be planted in an irregular way in the open spaces. In view of the menace of the white pine weevil and of the pine blister rust, many foresters are recommending the planting of the red pine, also called Norway pine, which is entirely immune from the weevil and the rust. The red pine could be established in pure plantations or in mixture with white pine or some other species adapted to the site. Although the red pine is not quite as good a commercial timber as white pine, yet it makes satisfactory lumber, is a rapid grower, and thrives on poor, sandy soil. It therefore appears to be a logical substitute for the disappearing chestnut.

Black oak, also known as yellow oak, Quercus velutina, is commonly found mixed with chestnut. It is a valuable timber tree, a fairly rapid grower, and is superior to red oak for fuel, ties, furniture, ship building and wheelwrighting. Stump analyses of this species, made by the writer, show that on Glocester stony loam, which is the principal forest soil of this state, this tree attains a diameter of 16 inches one foot from the ground at age 65 years, and sometimes in moist situations a diameter of 16 inches at age 45 years. This tree sprouts well, and if, in the cutting of stands, some of the black oaks are left to furnish seed in the open spaces where chestnut is taken out, there will be a natural reproduction of this oak as a substitute for chestnut. The acorn of this oak being bitter, is not eaten by the squirrel.

TREES TO PLANT.

Trees adapted to Rhode Island include the following named:

1. White Pine. A rapid grower on all kinds of well-drained soil. Flourishes on worn-out pastures. Endures some shade. The wood is light, soft, and easily worked; good quality, however, is found only in old trees. In brisk demand for boxboards and general construction. The best tree for commercial planting if the pine blister can be eradicated. In planting, mix with hardwoods, Hemlock or Red Pine.

2. Hemlock. A very graceful tree. Prefers light moist loam and cool situations. A slow grower but very shade-enduring. The wood is soft, brittle, and liable to wind-shake, and is used for general construction. The bark is used for tanning.

3. The Oaks thrive best on fresh, sandy loam, in warm situations. They are light-demanding. White Oak is a slow but persistent grower. Red Oak is fairly

rapid in growth. Black Oak prefers a moist site, but is found with Scarlet Oak on dry, gravelly ridges. Chestnut Oak inhabits rocky hills. Oak wood is used for shipbuilding, wheelwrighting, furniture, ties, and fuel.

4. Shagbark Hickory. Inhabits deep, rich bottom lands. Somewhat liable to injury by frost. Rather intolerant of shade. Does well in mixture with slow-grow-flexible, and is used in the manufacture of vehicles, tool handles, farm implements, picker sticks, etc. The nuts have a commercial value.

5. White Ash prefers rich loam along streams. A light-demanding, rapid-growing, valuable timber. Requires slower-growing companions like Maple, Oak, and Ironwood. The wood is heavy, hard, tough, elastic, and is used for all kinds of implements, furniture, pails, interior finish, and vehicles.

6. The Maples endure shade and thrive on a deep, moist loam. They are soil improvers. The Red Maple will grow in a swamp, but other species demand good drainage. The wood is heavy, hard, close-grained, and takes a good polish, and has a variety of uses, including furniture, flooring, school apparatus, drums for shafting, shuttles, spools, bobbins, and fuel.

Merchantable White Pine, Showing Natural Seedling Reproduction in the Background.—In Coventry.

7. Tulip Tree. Of great commercial value. Attains its best development in the Ohio river valley, but is distributed sparingly throughout Southern New England. It grows on sandy or clayey soil, and in this state it occurs in lowland and ravines in mixture with Maple, Ash, and Yellow Birch. It is a beautiful tree, grows rapidly, has a straight trunk, and is insect-proof and generally healthy. The wood is light, soft, of even texture, and is a good substitute for White Pine. It is used for interior finish, woodenware, boats, tables, and general construction.

8. Black Locust. Thrives on porous sandy loam. A rapid grower in youth. Intolerant of shade. Menaced with locust borer. The wood is heavy, hard, close-grained, and durable in contact with the soil. In fifteen years plantations produce wood for posts and fuel.

9. Poplars are rapid-growing, short-lived trees, preferring sandy loam. The wood is light and soft, and is used for paper pulp and fuel.

10. Chestnut, among our natives trees, stands first in size, rapidity of growth, and demand for a great variety of uses. It prefers porous, acid, glacial till to the more compact soils. It sprouts vigorously from the stump, but is intolerant of shade. The wood is light, elastic, coarse-grained, easy to work, and durable in contact with the ground. In this state it is used for ties, poles, posts, slack cooperages, boxes, crates, millwork, novelties, and scientific instruments. The nuts are edible. The tree is now practically wiped out by the chestnut blight, so that planting at present is not advisable.

Some other species, not natives, such as Red Pine, Norway Spruce, Cottonwood, Hardy Catalpa, and Black Walnut, grow fairly well.

YOUNG PINES.

The greatest abuse of forest property in Rhode Island relates to the destruction of young seedling white pine in woodlots cut for lumber and cordwood. One of the most common types in this state is mixed hardwoods having an understory of small white pine perhaps one to ten feet high. In cutting of such hardwoods, it is customary to destroy all or nearly all of these white pines, either by deliberately cutting them, or by skidding over them, or piling brush on them. In some woodlots half-hearted effort is now being made to save them,—a few are saved, while the greater part are destroyed, notwithstanding the fact that pine stumpage in this state rose from $5.00 per thousand board feet in 1906 to $20.00 in 1916. Many excuses are offered by woodsmen for such land skinning as this, but none of these excuses are good and reasonable ones. Such cutting leaves the land bare, idle, and non-productive for long periods of time. On the other hand, if in the cutting of these hardwoods, a reasonable degree of care were exercised to preserve from injury this understory of pines, the woodlot would, a few years later, yield a crop of white saw-logs worth far more than the hardwoods.

STATE FOREST RESERVES.

Twenty states, including all of New England except Rhode Island, now have forest reserves. Since the creation of the first state forest reserve in New York in 1883, the reserves have usually been acquired in the following ways: reservation of public lands and lands reverted to the state through non-payment of taxes; gifts to the state by private owners as in New Hampshire and Vermont; purchase by means of state appropriations or bond issues.

State forest reserves are intended to increase water power by regulating stream flow; prevent contamination of city water supplies; prevent erosion with its consequent clogging of river-beds and harbors with salt and sand; preserve wild game; afford recreation; produce timber; and demonstrate scientific forest management.

Lumber is cheap to-day because there are still found in the West and South stands of virgin growth. This virgin timber will soon be gone. Then prices will soar, because prices will then depend on the cost of production.

State forests on the watersheds would increase the value of factories using water for motive power. Forests serve as storage reservoirs, retarding the melting of the snows in spring and favoring the steady flow of deep-seated springs in periods of drought. Many of our large mills depend on water power. Some use both water and steam. The more water there is available, the less the amount of coal required.

There are many wood-using industries in this state. These have to depend largely upon other states for the supply of lumber. The source of supply will soon be so far away that these mills cannot compete with mills nearer the supply. These industries may be retained by assisting in the production of timber. Lumber is a heavy commodity and the cost of its transportation would go far towards the maintenance of local forests.

ESSENTIAL FOREST POLICY.

To stop forest fires and thus reclaim the hundreds of thousands of unproductive acres—acres which once supported a pine-oak forest among the richest on this continent; to secure a forest tax law that shall make timber growing possible by providing an annual ground tax on the bare lands plus an income tax when the timber reaches maturity; to provide state forests at the head of streams which furnish the waterpower of our textile industries; to supply with homegrown timber our local wood-using industries now paying millions of dollars for lumber and freight brought into the state; to convince the rural towns that forests and forestry are essential to a realization of the highest returns from the land and from summer business; to conserve the supply of fish and game;—these are some of the biggest things that can be done for the state of Rhode Island—things for which adequate appropriations of money should now be made.

ASSISTANCE OFFERED.

Every woodlot presents its specific problem which has to be studied on the lot. The State Department of Forestry is prepared to give advice, information and active aid, free of charge, to forest owners and lumbermen who apply for assistance. This department and also the United States Forest Service publishes for free distribution pamphlets and bulletins on the silvicultural methods of cutting and handling all kinds of woodlands.

PREVENTIVE MEASURES AGAINST FOREST FIRES

By Jesse B. Mowry, Commissioner of Forestry

Watch the forest in time of drought.

Clean the woodlot of slash and dead and dying trees.

Do not try, single handed, to burn brush.

Burn brush or rubbish when the ground is wet.

Mix broad-leaved species with conifers.

Teach children the meaning of forestry.

Post notices of the forest law.

Put spark arresters in locomotive and steam sawmills.

Caution choppers and other employees who travel the woods.

Never throw down in forest, field or roadside, burning matches, torches or cigarettes.

Never start a fire among dry leaves in the woods.

Remove or burn any brush cut along highways.

Dig wide fire-lines down to mineral soil around forest plantations.

Patrol and make fire-lines along the right-of-way of railroads through forests.

Never leave a bonfire in a smouldering condition, but put the fire completely out.

Keep the wood lots clear of brush so they are accessible.

Enlist the woodsmen, lumbermen, game wardens, boy scouts, fishermen, hunters, automobilists and rural mail carriers.

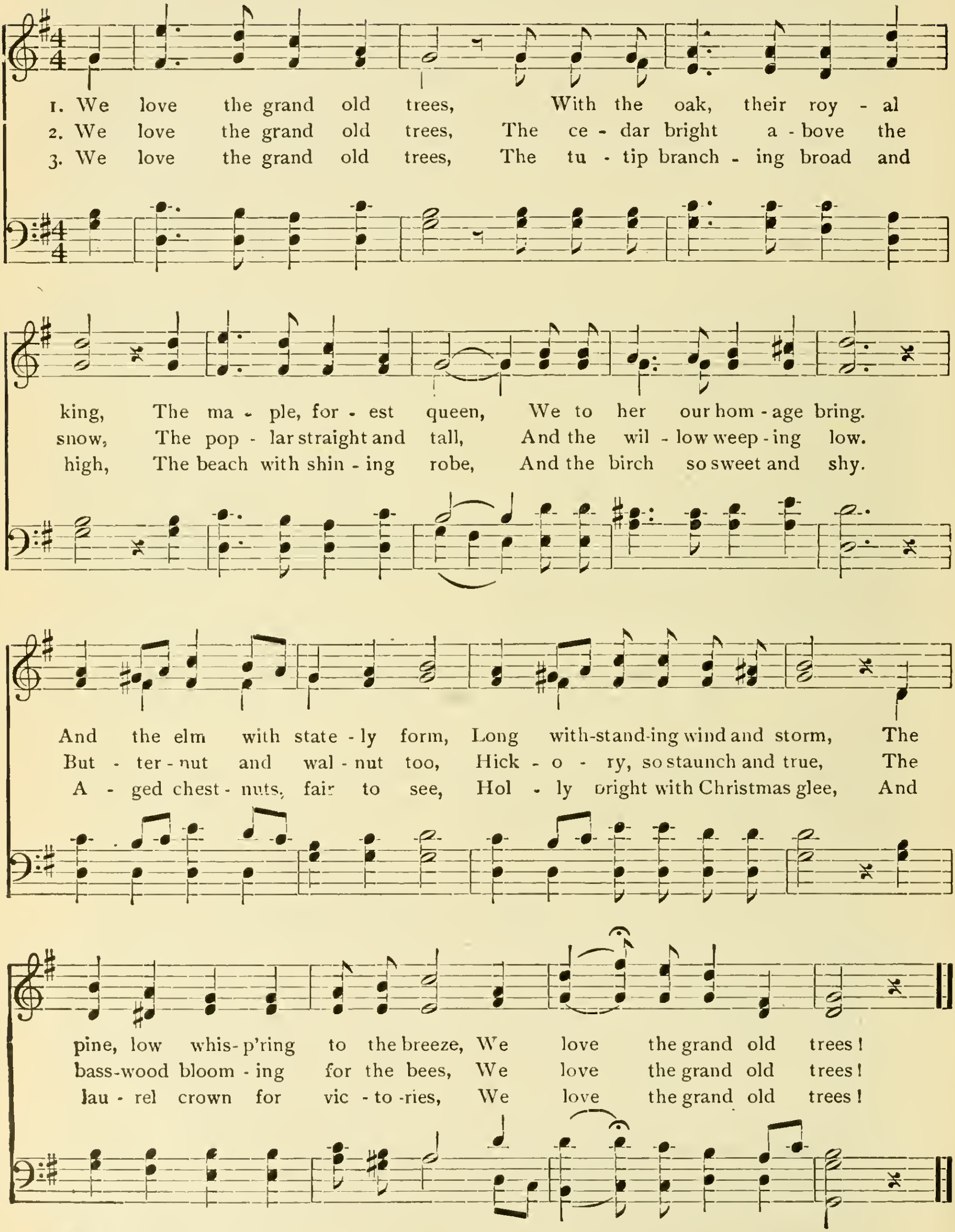
If you discover a fire near at hand and can extinguish it alone, do so immediately, otherwise notify the forest warden.

Burning over lawns and meadows is a dangerous practice and injurious to the grass roots and the hay crop.

Prosecute flagrant violators of the forest law whenever evidence is obtainable.

THE GRAND OLD TREES.

Journal of Education. GEORGE T. GOLDTHWAITE.


1. We love the grand old trees, With the oak, their roy - al
2. We love the grand old trees, The ce - dar bright a - bove the
3. We love the grand old trees, The tu - tip branch - ing broad and
king, The ma - ple, for - est queen, We to her our hom - age bring.
snow, The pop - lar straight and tall, And the wil - low weep - ing low.
high, The beach with shin - ing robe, And the birch so sweet and shy.
And the elm with state - ly form, Long with-stand-ing wind and storm, The
But - ter - nut and wal - nut too, Hick - o - ry, so staunch and true, The
A - ged chest - nuts, fair to see, Hol - ly bright with Christmas glee, And
pine, low whis-p'ring to the breeze, We love the grand old trees!
bass-wood bloom - ing for the bees, We love the grand old trees!
lau - rel crown for vic - to -ries, We love the grand old trees!

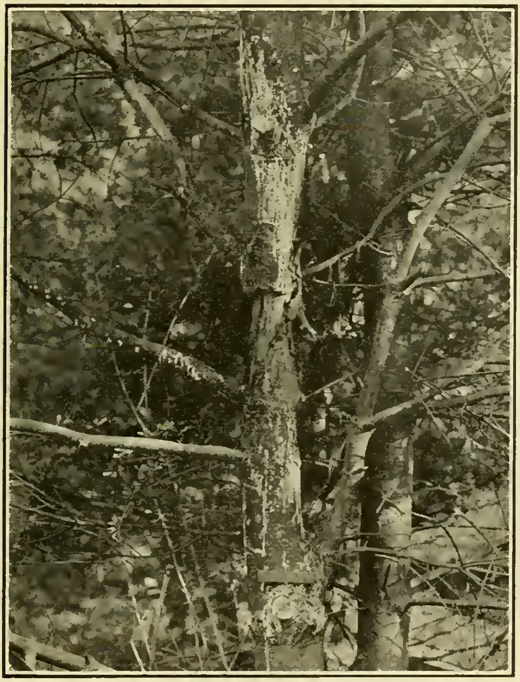
NOTE; The Bass may be omitted.

FOREST ENEMIES

By Ralph A. Sheals, Assistant Entomologist, State Board of Agriculture.

Not many years ago the forests which practically covered the country were considered almost as nuisances. Millions of board feet of the finest timber were burned so the land thus cleared could be used for agriculture crops. Practically the only timber utilized, except for firewood purposes, was that used in the construction of the dwelling houses and cattle sheds. There seemed to be no necessity for forest preservation. The entire country from the Atlantic to the Pacific was practically one vast forest through which the pioneer was obliged to win his way with his axe.

Soon, however, the rapidly increasing population and the resulting establishment of wood using industries created a demand for forest products. Vast holdings of timber land were bought up by the pioneer lumbermen who foresaw the increasing demand. The forests were no longer burned as at an earlier period but they were shamefully mistreated. It would be difficult to estimate the amount of wood left to rot after every lumbering operation in all parts of the country. The tops, containing cords of excellent wood, were left scattered about to rot and breed disease, to cause destruction throughout the forest, or to serve as fuel for forest fires. The slash composed of these abandoned tops has helped to feed the flames of many of those great conflagrations which swept over the timbered areas of our middle west, and the area beyond the Rocky Mountains where most of our big timber is now located.

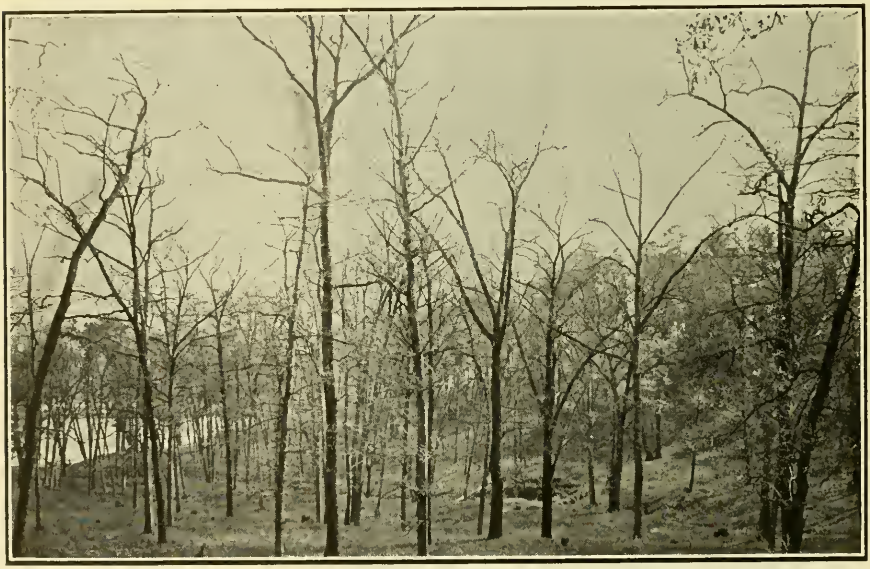


Tree Killed by Blister Rust. Note the Loosened Bark Extending Around the Tree.

Fifty years ago every one hundred acre farm in New England had approximately forty acres of good timber. To-day the farm woodlot is rapidly disappearing and the farmer is mainly responsible for his predicament. He, like the lumberman, used the best cuts for timber or firewood and left the branches and tops as disease spreaders or fire feeders.

Thus man has been the forest's worst enemy. At the present time, however, necessity has compelled him to realize his mistake. He is about to follow the example of the European countries and adopt scientific tree culture with replacement as a cardinal principle. However, man has not been, and is not now, the only enemy of the forests. Within the past few years insect pests and plant diseases have caused enormous losses in our forest regions. Of course, there were destructive insects and fungi in our forests in the pioneer days, but only in comparatively recent years have there been such serious pests as the chestnut blight, the white pine blister rust, the gipsy moth and the brown tail moth.

It is not necessary to look far to find the reason for the presence of such destructive fungi and insects in this country. The lack of suitable quarantine laws has been almost entirely responsible. By far the greater part of the damage done our forests by fungous diseases and insect pests within the past twenty years can be charged directly to the European or Asiatic pests introduced into this country. Due to the low wages paid in most foreign countries and the favorable shipping conditions, foreign nurserymen have been able to ship their stock over here and still keep the cost lower than that of the same type of nursery stock raised here. Due to lack of inspection of such stock several serious pests have been introduced.



Trees Defoliated by Gypsy Moth. Repeated defoliation kills trees.

It is not an exaggeration to say that in many respects America has become a dumping ground for diseased foreign nursery stock. In the early part of this century two of the most destructive fungous pests attacking forest trees were introduced into this country, one from Europe, and the other from Asia.

From Asia came the chestnut blight. It is unnecessary to say very much about the damage caused by this disease. The fine stands of American chestnut we used to admire several years ago are gone. The chestnut blight has been the cause of practically the total destruction of one of the very best commercial timber trees in the United States. The American chestnut would have been saved had we had adequate quarantine laws, well enforced.

From Europe came the White Pine Blister Rust, a fungous disease that is a serious menace to the most valuable commercial timber tree in the United States to-day. This disease of the white pines (five needled pines) has become firmly established in the eastern states and in several of the middle west states. It is particularly serious now in Maine, New Hampshire, and Massachusetts. The blister rust has but recently been found on native white pines in Rhode Island. and if practical control measures had not been adopted in 1917, and consistently carried on since by the State Board of Agriculture co-operating with the Bureau of Plant Industry, the disease would have been wide-spread now in our own state. Continuation of such control methods in Rhode Island is absolutely necessary if our valuable stands of pines are to be saved. Since the year 1917, the control work to check the spread of blister rust has cost the eastern states, co-operating with the Bureau of Plant Industry, several hundred thousand dollars annually. This expenditure would have been unnecessary had there been a suitable quarantine law, adequately enforced.

The white pine blister rust and the chestnut blight are the most serious of the imported fungous diseases, but they are not the only ones. In addition to the many fungous diseases such serious insect pests as the gipsy and brown tail moths have been brought into the United States from foreign countries. The brown tail moth is well under control in Rhode Island, but the gipsy moth has been increasing in numbers year by year and spreading into new territory. It threatens to cause very serious damage in this state to the broad-leaved trees that are the natural food of the pest. Control work against such pests is expensive. The damage by imported insect pests in United States amounts to many millions of dollars annually. It is not reasonable to assume that all this loss would have been averted if a strict quarantine act had been in force before the entry of such pests, but it is reasonabe to assume that a great many would have been kept out of the country and the property loss caused, reduced to a great extent.

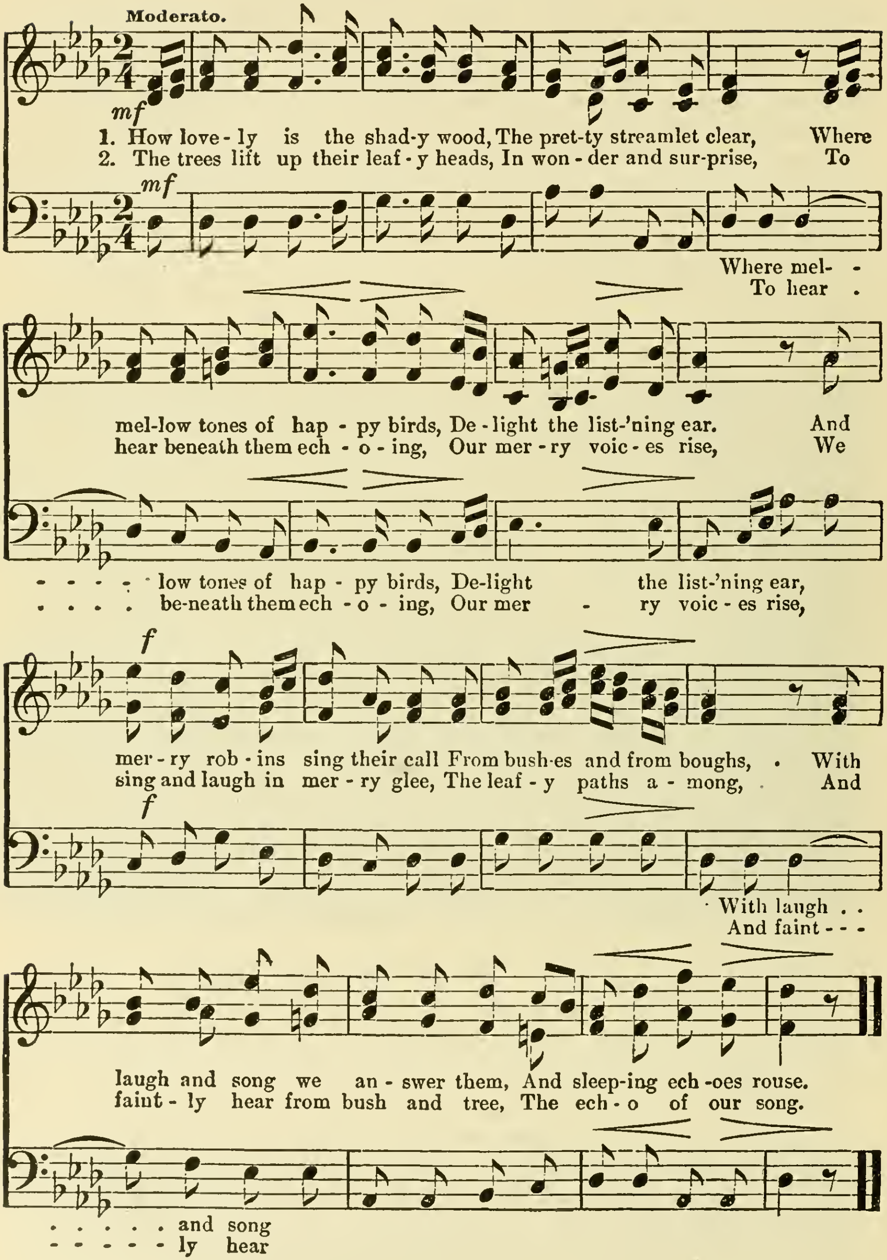
The Federal Horticultural Board, realizing the necessity of keeping "certain injurious insects and fungous diseases new to, and not heretofore widely distributed within and throughout the United States," out of the country, issued "Quarantine 37." This quarantine act was issued to take effect on and after June 1, 1919. It is practically certain that, if this act remains and is strictly enforced, the people of this country will be saved a large amount of money which otherwise would necessarily be spent in control measures. This Quarantine Act is under attack by powerful interests who are urging its repeal. It is hard to believe that a campaign against such a valuable act should be made from selfish motives, but it is difficult to find any justifiable grounds for such action. We need this Quarantine Act as a preventative measure. Let us make an Arbor Day resolution to keep it in force!

To increase our forest area by planting trees is very necessary. It is just as necessary to keep what trees we have free from the injury caused by fungous diseases and insect pests. The Board of Agriculture is ready at all times to do all in its power to assist residents of this state in their efforts to protect Rhode Island's forests.

FOREST PLANTATIONS EXEMPT FROM TAXATION IN RHODE ISLAND

Whenever there shall have been planted one or more acres of land worth not more than twenty-five dollars per acre, in the state, to trees of any of the following kinds: chestnut, hickory, oak, maple, larch, pine, ash, catalpa, locust, basswood, beech, hemlock, spruce, tulip tree, cedar, sycamore, and walnut, in numbers not less than five hundred to the acre, the owner of such plantation of trees may file with the tax assessors, in any town in which such plantation may be located, an affidavit showing that he has complied with the requirements of this chapter. Upon such proof, such plantation, including the trees and land on which they are growing in good condition, shall be exempted from all taxation whatsoever for a period of fifteen years, said period of exemption to be counted from the time the said land shall have been planted as aforesaid. or from the time it may have been necessary to replant same, by reason of destruction by fire, if the same shall be replanted within one year after such destruction: Provided, said land is planted or replanted, as the case may be, and managed under a forest working plan approved by the state commissioner of forestry during said period of exemption from taxation; provided, further, that the provisions of this chapter shall not be construed so as to exempt from taxation more than three hundred acres owned by any one person, corporation, limited copartnership, or association.—*Sec. 3, Chap. 56, General Laws.*

LOVELY IS THE SHADY WOOD.


Moderato.
mf
1. How love - ly is the shad-y wood, The pret-ty streamlet clear, Where
2. The trees lift up their leaf - y heads, In won - der and sur-prise, To
mf
Where mel- -
To hear .
mel-low tones of hap - py birds, De - light the list-'ning ear. And
hear beneath them ech - o - ing, Our mer - ry voic - es rise, We
- - - - low tones of hap - py birds, De-light the list-'ning ear,
. . . . be-neath them ech - o - ing, Our mer - ry voic - es rise,
f
mer - ry rob - ins sing their call From bush-es and from boughs, . With
sing and laugh in mer - ry glee, The leaf - y paths a - mong, . And
f
With laugh . .
And faint - - -
laugh and song we an - swer them, And sleep-ing ech -oes rouse.
faint - ly hear from bush and tree, The ech - o of our song.
. . . . . and song
- - - - - ly hear

AMERICA'S FORESTS

By Charles L. Pack in the "Outlook."

The people of the United States inherited from their fathers one of the greatest and richest heritages the world has ever seen—an area of timber-land which seemed, as was frequently remarked less than a generation ago, "inexhaustible." There were woods of nearly all known varieties, designed to meet the hundreds of uses to which man puts this most helpful and necessary of all natural resources.

It was because of the apparent impossibility of exhausting the great supply of timber with which this country was blessed that little thought was given by those of an earlier generation to the question of conservation—of saving, replanting, reforesting, the wooded territories of the United States. Doubtless it would have been impossible to persuade an audience of fifty or seventy-five years ago of the need of forest conservation.

Primaeval Forest.

—Western Forestry Association.

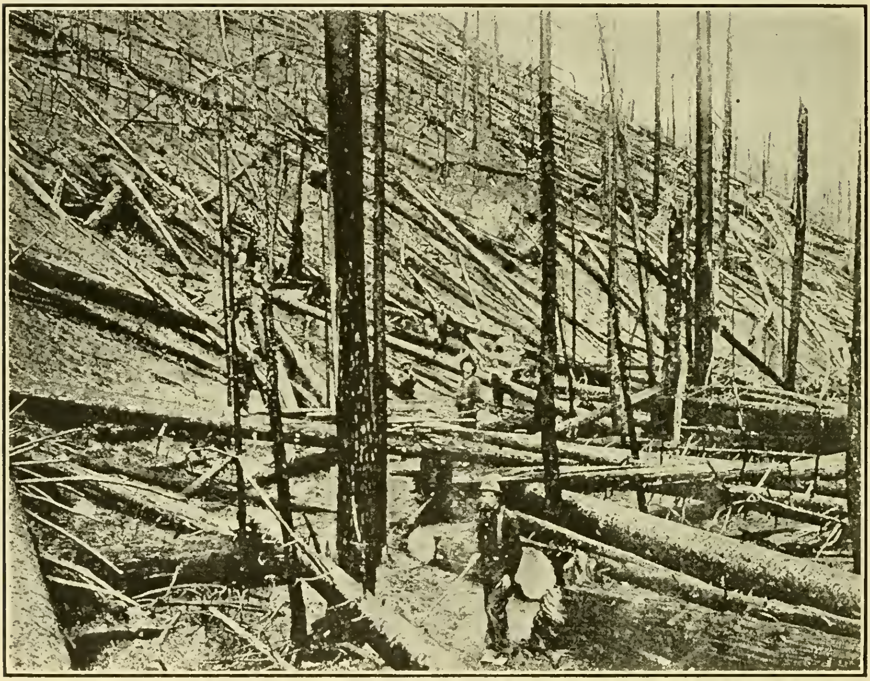
"What foolishness is this man talking?" they would have asked.

"Save trees?" What do you mean? Why, they grow faster than they can be used. And look at the limitless areas of untouched forest out West!"

No one preaching forest conservation to-day is called foolish. The people from one end of the land to the other have been realizing more and more during the past few years that the Nation's forest resources are not inexhaustible. They realize this every time they buy a newspaper and pay twice or three times the former cost. They realize it when they interview the furniture dealer on the price of some needed chairs and tables. They realize it when they come to building that home of their own on which they have been counting and discover that lumber is now selling as high as $70 per thousand feet against $28 and $32 before the war.

True, the present high prices of lumber and of most articles made from wood are not due entirely to the growing scarcity of timber supply in the United States. The present prices are due principally to war-time conditions from which we have not yet recovered. They are not due to an exhaustion which already has made itself felt in prices which belong to real famine days.

But the present prices have brought home to the people of the United States a fact which they had only begun to realize before, namely that there is need of saving some of the Nation's heritage—as much as possible, in fact—before it is squandered any further. The American people have been spendthrifts in many ways, and they have allowed one of their greatest natural resources to become seriously exhausted. They have been prodigal in cutting their timberlands; they have allowed vast areas which might have been producing trees during the past few decades to lie idle; they have not taken sufficient care to prevent the annual destruction by fire of thousands of acres of fine forests, with a loss of millions to the Nation's wealth.



Forest Swept by Fire and Hurricane.
—Western Forestry Association.

In short, there has been no National policy applied to forestry. The reason was because the people did not realize the seriousness of the situation and the importance of putting into effect some system of forest management which would help to save for the next generation—the people not of a distant future, but of the near future—some of the timber resources of the land.

To-day, for the first time in the history of the United States, there is united action ready to carry through the campaign for a National forest policy. It is America's greatest need to-day. The people of the United States—those who own wood, those who manufacture it into the articles of daily use, and those who buy the articles—all are ready to support the adoption of a policy which will help to save the forests, prevent them from being cut and burned down before they can be replenished.

To-day for the first time everybody who is interested in any way in the question of forestry is standing ready to urge the adoption by the Congress of the United States of a National forest policy. This policy is to be in line with that which will be provided for in the various states by legislation suited to their individual needs. There must be co-operation, however, between the National Government and the states in order to make the policy a complete success.

There must be ample fire protection. Forest fires will destroy in a few days what it has taken nature from fifty years to a century to build. This is one of the most important single steps which can be taken at the present time in carrying out a National forest policy. Forest-fire protection can be started at once, and will result in an immediate saving of, which really is an addition to, the Nation's timber resources. Some of the other features of the forest policy which must be adopted cannot be put into practice and bring definite results as promptly as that of fire protection.

The National forest policy should provide means for the reforestation of cut-over and denuded lands, so that there will not be vast areas, as at present in growing acreage, lying waste and barren, of no use to man or beast. There are millions of acres of such land which should be producing wealth. At the present time it represents nothing but money not being employed for any purpose. Both the Nation and the states can help in getting such land back to usefulness.

There should be more rapid replanting of the vast areas which lie within the bounds of the forests already owned by the Government.

The proper cutting and removal of timber crops is one of the most important features which must be included in any National forest policy. Unless a certain number of trees are left in any territory whose forest resources are being harvested, the process of getting a new forest started on the land will be a slow and expensive one. With some seed trees left, reforestation is certain and the vast denuded wastes will be avoided. It is important, if possible, to find a way by which all timber cutting will take place in a more rational way, with due regard to better forestry practice.

WHY WE PLANT THE TREE

First Pupil—
We plant the tree for the shade it gives;
For the shade of a leafy tree
On a summer's day when the hot sun shines
Is a pleasure for all to see.

Second Pupil—
We plant the tree for the wood to use
In winter to keep us warm,
And for hall and church and store and house,
To have shelter from the storm.

Third Pupil—
We plant the tree to please the eye,
For who does not like to see,
Whether on hill or plain or dale,
The beauty of a tree?

Fourth Pupil—
We plant the tree for the dear bird's sake,
For they can take their rest,
While the mate sings songs of love and cheer
To the mother on her nest.

—***Primary Education.***

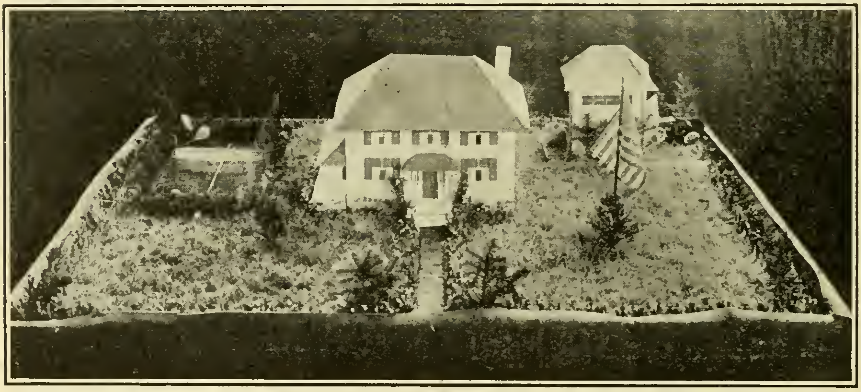
COMMUNITY PROJECTS IN A SAND-BOX

William Gould Vinal, Rhode Island College of Education.

There are three important elements which enter into a community project in a sand-box. (1) The desire of a group of individuals to represent some important fact of life. (2) The gathering of the needed information from observation, conversation, and books. (3) A worth while representation of this fact so that not only the designers but others will obtain a clearer understanding of the question at hand.

The advantage of a sand-box over a sand-table lies in the possibility of having a real and often times a living representation. One may grow real trees instead of using paste-board images, have grass instead of green sawdust, water instead of mirrors, cement walks instead of lines on paper.

Some of the larger values of this kind of project work are quite evident. There is what may be called a sub-conscious practical knowledge. The majority of city children do not realize that grass comes from seed. They unconsciously realize this fact through growing grass from seed. The mixing of sand and cement becomes a real problem. The foreman of this committee was chosen in a third grade because he had some notions from having watched an uncle who is a builder of cement side-walks. A spirit of coöperation is developed which is often needed in older communities. The representation must not be a failure because some one does not do his part in the organized whole. Each individual representation must be up to the standard of the general scheme or it will not harmonize or "fit into things." Such an undertaking cultivates the imagination. Each pupil or group of pupils finds his part of the whole truth or principle and seeks some way to express it. The less or immediate benefits are as varied and numerous as the projects themselves.



Sand Box Project.—Beautiful Home Grounds.

A few examples are described to illustrate how such a project may be carried out.

I. Beautiful Home Grounds.

The preparation consisted of studying some of the general principles of landscape-gardening as outlined in the Arbor Day booklet for 1919, pp. 20-22. The pupils were given the pictures of beautiful homes and by studying the principles found what gave the pleasing effects to the different estates.

The organization consisted of various committees who reported their progress to the class for suggestions and criticisms. The committees and their duties were as follows:

1. *Lawn.* The lawn was planted with grass seed. Care had to be used to distribute the seed evenly. The watering had to be done gently in order not to wash the seed into hollows. There was an interesting competition to discover the first blade of grass. The lawn was trimmed with scissors.

2. *House.* The location of the house determined the walks, trees, and shrubbery. It presented an excellent lesson in colors. The green roof and trimmings harmonized with the grass. The white body of the house gave a very neat appearance. The construction of the card-board house furnished an excellent project in drawing. The size and number of curtains gave live problems in arithmetic.

3. *Garage.* This building was made on the same style and color as the house. It was placed economically and conveniently for the owners.

4. *Walks.* The committee voted to use cement. The mixing of the cement, the form for the cement, the plan and scale of the walks furnished practical problems in fractions.

5. *Tennis Court.* The location in regard to the sun, the fence net, and rackets tested the ingenuity of the designers.

6. *Hedge.* The hedge is determined by the location of buildings, walks and the tennis court. The committee made real cuttings from the privet hedge. The buds produced leaves and the cuttings took root in the sand. They were later transplanted to their homes.

7. *Vegetable Garden.* This play garden caused a great deal of research for natural representations. Green buds were used to represent cabbages, pine needles for onion tops, twigs of barberries for peppers, etc.

8. *Flower Gardens.* This was another problem in colors and representations.

9. *Trees and Shrubs.* The most satisfactory trees were made by using evergreen cuttings. The deciduous trees were made by planting maple seeds and acorns.

II. Providence, 1650: A Correlation in Nature-study and History.

In nature-study there was research as to the representation of the pine forest that covered Capitol Hill, the material of thatched roofs, the characteristics of swamps with hummocks, the drainage to the old spring, the workings of a grist mill, the possible logs for a cabin, the material at hand from which the settlers made the fireplace and chimney.

1. *Prospect and College Hill.* This steep-sided hill is seen on the far end of the box. It is covered with a thick growth of trees. Each settler had a strip of land running from his homestead to the highway (Hope Street) on top of the hill. Amongst the growth on the vacant lots of this section may be seen wild apple trees. These undoubtedly have descended from the original orchards that used to be on this steep hill-side.

2. *Log Cabins.* The log cabins are made of plasticine. In the plasticine are placed fine sticks which represent logs. Back of the houses is a chimney, the exterior consisting of fine grains of sand to represent rocks. The thatched roofs are made of fine grass arranged like shingles.

3. *North Main Street.* The trail running in front of the log houses is shown in the picture as a light line. That trail is the present North Main Street.

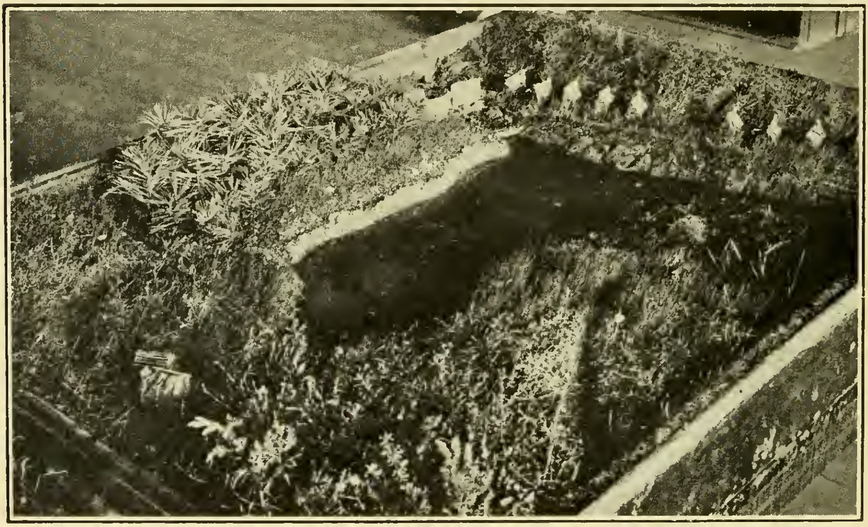
4. *The Moshassuc River* flows down the valley parallel to North Main Street.

It turned the wheel of Smith's old grist mill and passed beneath one of the first bridges of the town into the cove. The Louquassuck Trail crossed by this mill.

5. *The Cove* is the dark central portion of the picture. A cement basin made water proof by paraffin formed the base. This was covered with clean sand to form a natural setting for the water.

6. *Smith's Hill* was covered with pine trees. Its sandy bluffs formed the northern boundary of the Cove. On the summit above the mill is the site of the present State House, and a little farther to the westward the Rhode Island College of Education.

7. *Weybosset Street.* The dark line winding on the right of the fore-ground is the Pequot Path which led to the land of the Narragansetts on the south. Weybosset Island and the hummocks amongst the marshes formed stepping stones to the village on the east side. This detour in the trail forms the present curve in Weybosset Street.



Sand Box Project—Providence in 1650.

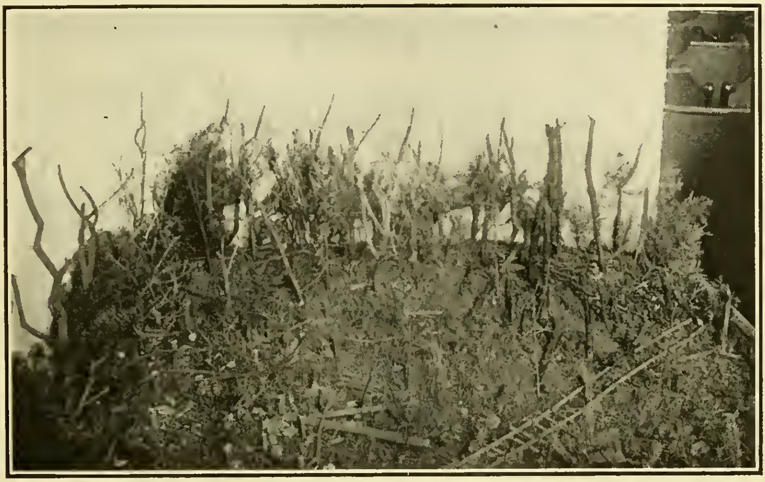
8. *College Street* is a dark line showing the continuation of Weybosset Street up College Hill. It was called the Wampanoag Trail and led to the country of Massasoit and the Plymouth Bay Colony.

9. *The Woonasquatucket River* is hidden by the forests. An early settler had set himself away from the rest of the village and built a cabin on the banks of the river. Just west of the pine woods is a little ravine which marks the location of a small tributary that runs through Davis Park to the Woonasquatucket.

III. A Study in foresty: Suggested Projects for Arbor Day.

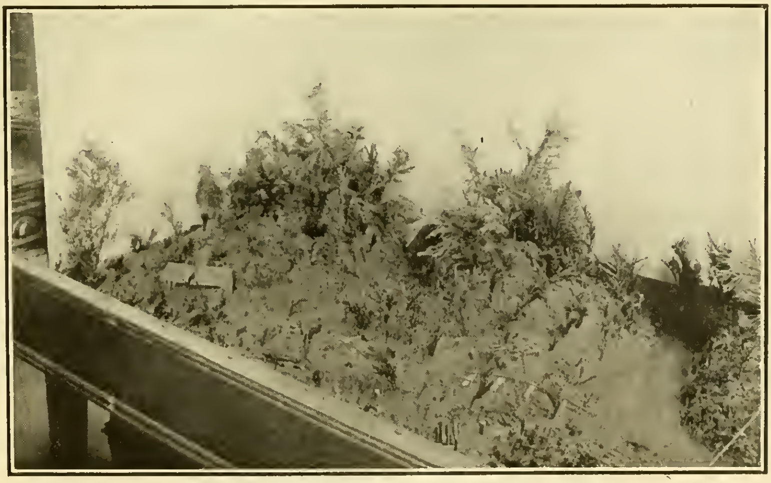
1. *Destructive Lumbering* (Picture III). The owner of this forest has had no regard for the future and has been very wasteful with his timber. Reckless lumbering is seen in the high stumps and large logs left to decay on the ground. The brush furnished food for a fire and the fire-killed timber is now falling and getting ready for the next fire. The young trees are returning but will be killed by the next fire. The wood which was exposed by the fire is now being attacked

by fungi and the insects are finding good opportunities for boring into the trunks. The leaf-mould no longer holds the rainfall and the soil is washing onto the railroad track making it dangerous for transportation.



Destructive Lumbering.

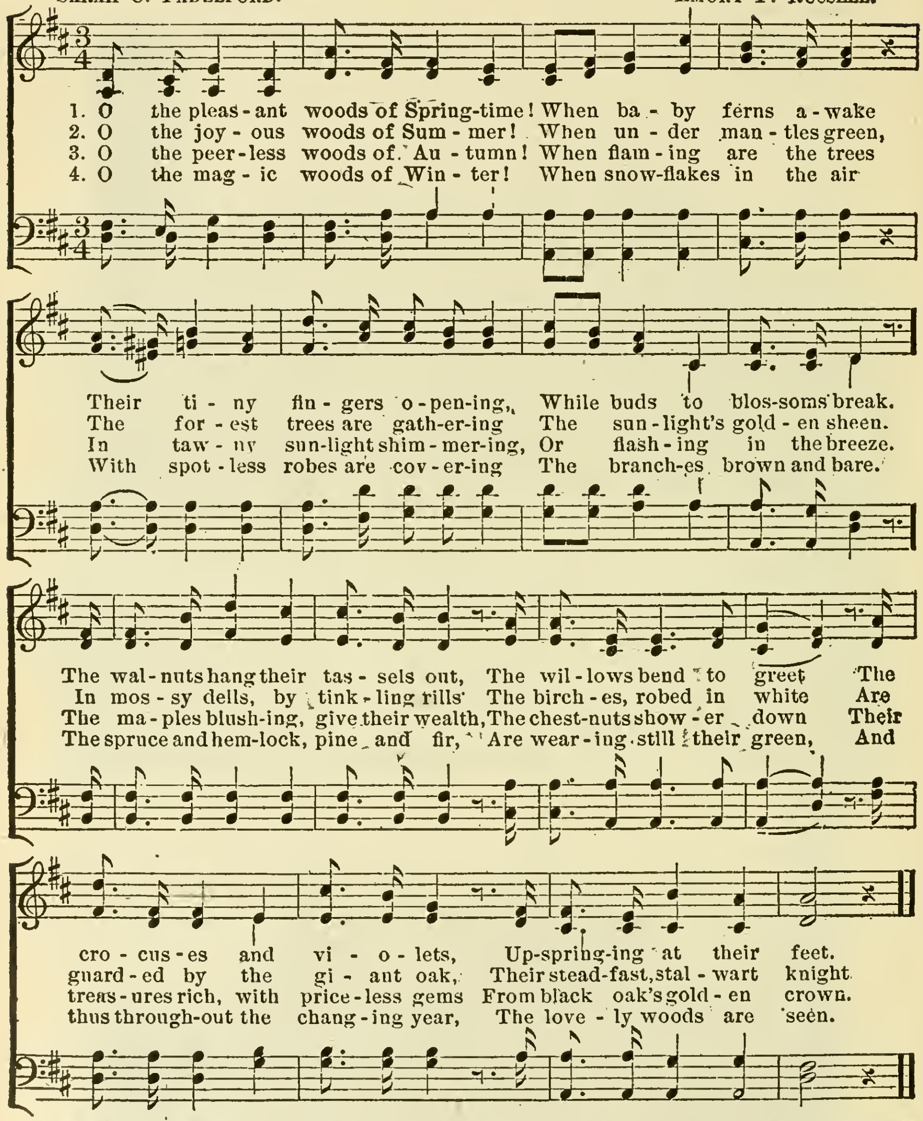
2. *Constructive Forestry.* (Picture IV). The golden rule of forestry is to thin often. The stumps show where the large useful trees have been cut for lumber and fire-wood. The younger trees now have room to grow. The brush has been burned as "an ounce of prevention" for forest fires. The forests are not cleared from the steep hillsides and therefore there are no floods or wasting of the rich soil. The owner of this wood-lot will always have a supply of wood.



Constructive Forestry.

2 The Beautiful Woods

Sarah C. Padelford. **Emory P. Russell.**


1. O the pleas - ant woods of Spring-time! When ba - by ferns a - wake
2. O the joy - ous woods of Sum - mer! When un - der man - tles green,
3. O the peer - less woods of Au - tumn! When flam - ing are the trees
4. O the mag - ic woods of Win - ter! When snow-flakes in the air
Their ti - ny fin - gers o - pen-ing, While buds to blos-soms break.
The for - est trees are gath-er-ing The sun - light's gold - en sheen.
In taw - ny sun-light shim - mer-ing, Or flash - ing in the breeze.
With spot - less robes are cov - er-ing The branch-es brown and bare.
The wal - nuts hang their tas - sels out, The wil - lows bend to greet The
In mos - sy dells, by tink - ling rills The birch - es, robed in white Are
The ma - ples blush-ing, give their wealth, The chest-nuts show - er down Their
The spruce and hem-lock, pine and fir, Are wear - ing still their green, And
cro - cus - es and vi - o - lets, Up-spring-ing at their feet.
guard - ed by the gi - ant oak, Their stead-fast, stal - wart knight.
treas - ures rich, with price - less gems From black oak's gold - en crown.
thus through-out the chang - ing year, The love - ly woods are seen.

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Only a man in a forest green,
Only a match that was dropped unseen.
Only a flame—some leaves and wood,
And only a waste where the forest stood.

—*George B. Pratt.*

SOLACE OF THE WOODS

Woods, water, have a charm to soothe the ear,
When common sounds have vexed it: when the day
Grows sultry, and the crowd is in thy way,
And working in thy soul much toil and care,
Betake thee to the forest; in the shade
Of pines, and by the side of purling streams
That prattle all their secrets in their dreams,
Unconscious of a listener—unafraid—
Thy soul shall feel their freshening, and the truth
Of nature then, reviving in thy heart,
Shall bring thee the best feelings of thy youth,
When in all natural joys thy joy had part,
Ere lucre and the narrowing toils of trade
Had turned thee to the thing thou wast not made.

—*William Gilmore Simms.*

A FIELD TRIP IN WINTER

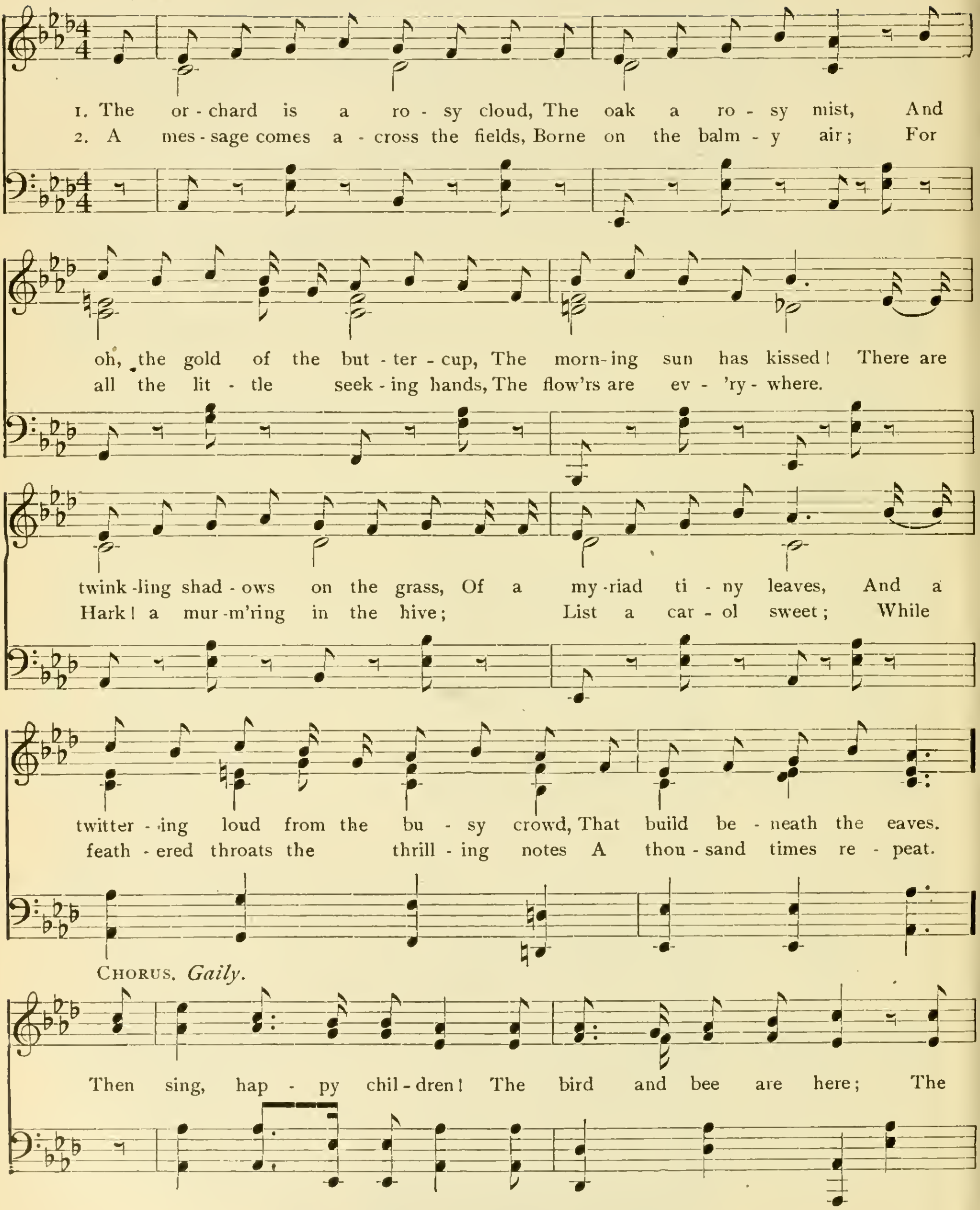
Mabel A. Crowe, Rhode Island College of Education.

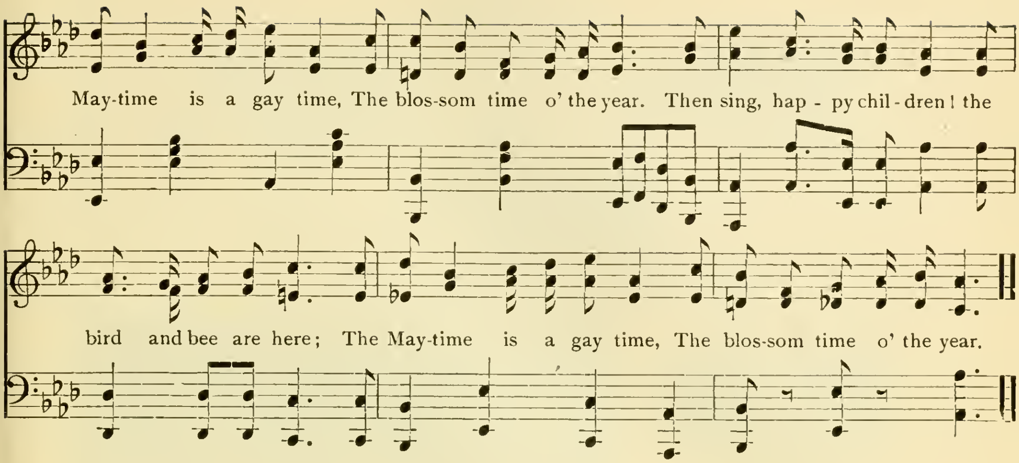
(Written as a class exercise to express the observations made upon an early spring field trip.)

Not so far from all the city's throngs,
  Not so far from all the din,
Filled with trees of many kinds
  Was the place we entered in.
On the ground an umber carpet
  Of the winged maple seeds,
Showed there had been too great numbers
  For the coming summer's needs.
The gray Horse-chestnut's brown bud-scales
  Seemed to glisten in the sun;
Within each a downy blanket
  Keeps the leaves safe ev'ry one.
Underneath a spreading oak tree
  Was a dainty Arbor Vitae,
With its lacy leaves entwining
  Like those of the climbing ivy.
There, between four lofty poplars,
  Like grim Puritans of old
Come to judge a poor lost sinner,
  Who had strayed far from the fold,
Stood a tiny broken Spruce tree
  Whose small needle-laden limbs
Had been proved too small and slender,
  To withstand the winter winds.
Then we note the empty seed cups
  That are on the Tulip trees
And the gilt balls of the Buttonwood,
  Swaying gently in the breeze.
Overhead we hear the calling
  Of the hawk as he sails by,
Swiftly as the clouds above him,
  Cross the blue and distant sky;
Where the heralds of the springtime
  Tiny flecks of heaven's blue
From behind the sullen storm clouds,
  Seem to struggle to peep through.

MAY.

ANNA M. PRATT.


1. The or-chard is a ro-sy cloud, The oak a ro-sy mist, And
2. A mes-sage comes a-cross the fields, Borne on the balm-y air; For
oh, the gold of the but-ter-cup, The morn-ing sun has kissed! There are
all the lit-tle seek-ing hands, The flow'rs are ev-'ry-where.
twink-ling shad-ows on the grass, Of a my-riad ti-ny leaves, And a
Hark! a mur-m'ring in the hive; List a car-ol sweet; While
twitter-ing loud from the bu-sy crowd, That build be-neath the eaves.
feath-ered throats the thrill-ing notes A thou-sand times re-peat.
CHORUS. Gaily.
Then sing, hap-py chil-dren! The bird and bee are here; The


May-time is a gay time, The blos-som time o' the year. Then sing, hap - py chil - dren! the
bird and bee are here; The May-time is a gay time, The blos-som time o' the year.

SPRING

When March, with wind and sleet, is here—
There's something better coming, dear;

The snow's a-melting every day,
Jack Frost will soon be gone away—

From out the earth, so bare and brown,
Will peep the golden "Daffy-down"—

The violet and anemone
Will bloom for everyone to see—

While from the south, the land of sun,
The birds come winging, one by one;

Each branch will bud, each bird will sing,
And once again it will be spring.
—*H. Winifred Griffiths.*

NEW ENGLAND'S NOSEGAY

In old New England's nosegay, flowers appear
For spring and summer and for all the year.
First in the spring, and in our hearts beside,
The lovely Mayflower, Massachusetts' pride!
Connecticut drops mountain laurel showers,
New Hampshire, fragrant purple lilac flowers.
Vermont says: "Let my clovers red be thine!"
And Maine: "Take cones and tassels from my pine!"
While wee Rhode Island brings her violets blue,
And offers them, Columbia, to you!
—*Agnes Miller in "Columbia's Bouquet."*

ON PLANTING A TREE

Who does his duty is a question
  Too complex to be solved by me,
But he, I venture the suggestion,
  Does part of his that plants a tree.

What though his memory shall have vanished,
  Since the good deed he did survive?
It is not wholly to be banished
  Thus to be part of many lives.—*Lowell.*

THE CLASS TREE

(*Tune—America.*)

Grow thou and flourish well,
Ever the story tell
Of this glad day;
Long may thy branches raise
To heaven our grateful praise;
Waft them on sunlight rays
To God away.

Deep in the earth to-day,
Safely the roots we lay,
Tree of our love;
Grow thou and flourish long!
Ever our grateful song
Shall its glad notes prolong
To God above.

"Let music swell the breeze,
And ring from all the trees,"
On this glad day;
Bless Thou each student band
O'er all our happy land;
Teach them Thy love's command,
Great God, we pray.

—*Emma S. Thomas.*

MY LEGACY

The little tree I planted out
And often muse upon,
May be alive to grow and thrive
And out into the sunlight strive,
When I am dead and gone.

So it shall be my legacy
To toilers in the sun,
So sweet its shade, each man and maid
May be induced to take a spade
And plant another one.

—*Ethelwyn Wetherald.*

THE TALL TREES BOW

I think I know
The reason why
The tall trees bow
When winds go by.

They bow to see
Upon the sod
The mystic feet
Of Father God.

And that is why
They bow them low
At even,
When the cool winds blow.

—*Harry Lee.*

THE VIOLET CHILDREN

The Violet children have come again,
Some in the meadow, and some in the lane;
Some dressed in yellow, some dressed in white,
Some dressed in blue gowns, a beautiful sight;
Some hiding shyly deep down in the grass,
Some looking saucily up as we pass,
All of them welcome to you and to me,
Wherever their dear little faces we see.

—*Virginia Baker.*

DANDELIONS IN THE GRASS

Last night the wind was very high
And blew so hard, alas!
It swept the stars from out the sky
And blew them on the grass.

But in the scarey, dusky cold
Some queer somebody came
And gathered up that yellow gold
And blew it back again!

—*Hilda Norman.*

"We reverence these famous trees,
What better monuments than these?
How fitting on each Arbor Day
That we a grateful tribute pay
To poet, statesman, author, friend;
To one whose deeds our hearts commend,
As lovingly we plant a tree
Held sacred to his memory;
A fresh memorial, as each year
New life and buds and leaves appear,—
A living monumental tree,
True type of immortality!"

OUR TREE

By Gladys Pepper, Seventh Grade Pupil, Cranston

A tree we'll plant this Arbor Day,
And to it homage we will pay.
Under its spreading leaves some day,
I and my schoolmates all will play.
It will grow toward the heavens high,
And I hope that it will never die.
We plant it, dear Lord, and give thanks to thee,
And call it the Arlington Grammar School Tree.

LOVE OF TREES

Who loves the trees best?
"I," said the Spring.
"Their leaves so beautiful
To them I bring."

Who loves the trees best?
"I," Summer said,
"I give them blossoms,
White, yellow and red."

Who loves the trees best?
"I," said the Fall.
"I give luscious fruits,
Bright tints to all."

Who loves the trees best?
"I love them best,"
Harsh Winter answered,
"I give them rest."
—*Alice May Douglas.*

A SEED

We plant a little baby seed
Beneath the warm brown earth,
And soon it breaks its tiny shell,
And works for all its worth.

And sends one arm away down low,
To find the food and drink,
Then pushes up its face to light,
Much sooner than you think.

The little leaves turn very green
So they can take their food
Of gas, they find up in the air,
And grow up straight and good.

THREE LITTLE TREES

Way out in the orchard, in sunshine and breeze,
A-laughing and whispering, grew three little trees.

And one was a plum tree, and one was a pear,
And one was a rosy-cheeked apple tree rare.

A dear little secret, as sweet as could be,
The breeze told one day to the glad apple tree.

She rustled her little green leaves all about,
And smiled at the plum, and the secret was out.

The plum told in whispers the pear by the gate,
And she told it to me, so you see, it came straight.

The breeze told the apple, the apple, the plum,
The plum told the pear, "Robin Redbreast has come!"

And out in the orchard they danced in the breeze,
And clapped their hands softly, these three little trees.
—*Normal Instructor.*

THE STORY OF THE FOUR APPLE TREES

Many years ago there was a man who wanted to have a beautiful orchard. So he sent for some young trees, knowing that he should not have to wait so long for his orchard if he planted trees which had already had a good start in growing.

Unfortunately, however, the trees arrived just at a time when the man was obliged to leave home for several days. He was afraid the trees would not live unless they were planted very soon, and yet he could not stay to attend to them. Just then a man came along who wanted work.

"Do you know how to set out trees?" asked the owner.

"Yes, indeed," said the other man.

"Then you may stay and set out these young apple trees. I am going to have an orchard, and I have marked the places for the trees, with stones."

By and by the owner of the trees came back and went to look at his orchard. He had been gone four days.

"How is this!" said he; "only four trees set out?"

"That is all I had time for," answered the other man. "I dug great holes, so that the roots might be spread out to the farthest tip; I hauled rich earth from the woods, so that the trees might have the best of food; I set the trees straight and filled the holes with care. This took all the time, but these four trees are well planted."

"That is too slow a way for me," said the owner. "I can plant the whole orchard in one day."

So he went to work and planted the other trees in his own way. He did not dig the holes large enough or deep enough, and so many of the little root-mouths were broken off when he set the trees into the holes. He did not take pains to get soft, rich earth to fill the holes, and so the trees could not have as good food as they needed.

The poor little trees lived for a while, but they were never very strong, never bore very good apples, and at last were cut down. All that was left of the orchard were the four trees which had been planted with such faithfulness and care.

These four trees are now older than an old man, and have been bearing delicious great apples for many, many years.

As Dr. E. E. Hale says, when he tells the story, these four apple trees stand as a memorial of what it is to do a thing well.

TREES

I.

I am just an apple tree,
Blossom in the Spring;
Pink and white flowers,
Early do I bring.
Then the little apples
Grow upon my tree,
Making quite the nicest food,
Food for you and me!

II.

I'm a big black willow,
Growing by the stream,
Long and slender are my arms,
Weaving like a dream;
I drink lots of water,
And if you ever ask it,
I'll tell you that my shoots
Will make a chair or basket.

III.

I'm a sturdy elm tree,
I will bring good luck,
If you plant me nicely,
And you're full of pluck.
I have a funny brother,
His bark is wet and sticky,
And so we call him Slippery Elm,
Because he is so tricky.

IV.

They call me the Red Maple,
I grow up tall and straight,
I blossom early in the spring,
And work until quite late.
For when I make the sap
There comes the sugar man,
And makes up maple sugar,
And sells it when he can.

V.

I am an old, old walnut tree,
Boys like me in the fall,
When they can go a nutting,
And hunt my brown ball;
They get their hands all brown,
But that's part of the game,
For when they take off all the husk,
They eat me just the same.

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